

Notice of Allowability

Application No.

10/603,439

Examiner

J. Derek Rutten

Applicant(s)

SHAYLOR ET AL.

Art Unit

2192

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 2/2/07 amendment.
2. ☒ The allowed claim(s) is/are 1-6, 8, 9, 11-17, 19, 20, 22-28, 30, 31, 33, and 34 (renumbered 1-28).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (~~PTO-413~~, **PTOL-413B**) Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

TUANDAM
SUPERVISORY PATENT EXAMINER

DETAILED ACTION

1. This action is in response to Applicant's submission filed 2/2/07, responding to the 11/27/06 Office action which detailed the rejection of claims 1-34. Claims 1, 12, 23, and 34 have been amended. Claims 1-34 remain pending in the application and have been fully considered by the examiner.

Response to Amendment/Arguments

2. Applicant's arguments in combination with the amendment, see page 11, filed 2/2/07, with respect to the drawing objection have been fully considered and are persuasive. The objection of the drawings has been withdrawn.

3. Applicant's arguments in combination with the amendment, see bottom of page 11, filed 2/2/07, with respect to the rejection under 35 U.S.C. § 101, have been fully considered and are persuasive. The rejection of claims 12-22 has been withdrawn.

4. Applicant's arguments, see pages 12-13, filed 2/2/07, with respect to the rejections under 35 U.S.C. § 103(a), have been fully considered and are persuasive. However, it is noted that the features upon which applicant relies (i.e., loading all methods and loading without a constant pool – see bottom of page 12 through top of page 13) are not recited in the rejected claims.

Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). However, the examiner's amendment detailed below obviates the issue.

EXAMINER'S AMENDMENT

5. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Shun Yao, Reg. No. 59,242 on 3/8/07.

In the interview, it was agreed that an amendment to each of the independent claims 1, 12, 23, and 34 to reflect the invention as argued in Applicant's 2/2/07 amendment would overcome the prior art of record. Such limitations were found in dependent claims 7, 10, 18, 21, 29, and 32, respectively. These dependent claims are therefore canceled as required by 37 CFR 1.75(c) since they would fail to further limit the parent claim.

The application has been amended as follows:

--Begin Examiner's Amendment--

In the Claims:

Please amend independent claims 1, 12, 23, and 34; and cancel claims 7, 10, 18, 21, 29, and 32 as follows:

1. (Currently Amended) A method for loading classes into memory, comprising:
loading class definitions into memory;

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wherein the class definitions are loaded from a serialized suite file defining a collection of classes;

wherein the class definitions contain ~~metadata~~ real class definitions for classes that are currently being loaded into memory, as well as ~~metadata~~ proxy class definitions for classes that are already loaded into memory; and

wherein the suite file is organized so that the class definitions for all of the classes in the suite file precede method code corresponding to the real class definitions, thereby facilitating loading the class definitions prior to loading the method code;

after the class definitions are loaded into memory, loading the method code ~~for the~~ classes into memory;

wherein loading the method code into memory involves transforming the method code, wherein transforming the method code involves using the class definitions to resolve linkages in the method code so that the method code is ready for execution in memory without using a symbolic constant pool.

7. (Canceled)

10. (Canceled)

12. (Currently Amended) A computer-readable storage medium storing instructions that when executed by a computer cause the computer to perform a method for loading classes into memory, the method comprising:

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loading class definitions into memory;

wherein the class definitions are loaded from a serialized suite file defining a collection of classes;

wherein the class definitions contain ~~metadata~~ real class definitions for classes that are currently being loaded into memory, as well as ~~metadata~~ proxy class definitions for classes that are already loaded into memory; and

wherein the suite file is organized so that the class definitions for all of the classes in the suite file precede method code corresponding to the real class definitions, thereby facilitating loading the class definitions prior to loading the method code;

after the class definitions are loaded into memory, loading the method code ~~for the~~ classes into memory;

wherein loading the method code into memory involves transforming the method code, wherein transforming the method code involves using the class definitions to resolve linkages in the method code so that the method code is ready for execution in memory without using a symbolic constant pool.

18. (Canceled)

21. (Canceled)

23. (Currently Amended) An apparatus that loads classes into memory, comprising:
a loading mechanism;

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wherein the loading mechanism is configured to load class definitions into memory;

wherein the class definitions are loaded from a serialized suite file defining a collection of classes;

wherein the class definitions contain ~~metadata~~ real class definitions for classes that are currently being loaded into memory, as well as ~~metadata~~ proxy class definitions for classes that are already loaded into memory; and

wherein the suite file is organized so that the class definitions for all of the classes in the suite file precede method code corresponding to the real class definitions, thereby facilitating loading the class definitions prior to loading the method code;

wherein after the class definitions are loaded into memory, the loading mechanism is configured to load the method code ~~for the classes~~ into memory;

wherein loading the method code into memory involves transforming the method code, wherein transforming the method code involves using the class definitions to resolve linkages in the method code so that the method code is ready for execution in memory without using a symbolic constant pool.

29. (Canceled)

32. (Canceled)

34. (Currently Amended) A computing device configured to load classes into non-volatile memory, comprising:

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a computing engine;

a volatile memory;

a non-volatile memory;

a loading mechanism;

wherein the loading mechanism is configured to load class definitions into the volatile memory;

wherein the class definitions are loaded from a serialized suite file defining a collection of classes;

wherein the class definitions contain ~~metadata~~ real class definitions for classes that are currently being loaded into non-volatile memory, as well as ~~metadata-proxy~~ class definitions for classes that are already loaded into non-volatile memory; and

wherein the suite file is organized so that the class definitions for all of the classes in the suite file precede the method code corresponding to the real class definitions, thereby facilitating loading the class definitions prior to loading the method code;

wherein after the class definitions are loaded into volatile memory, the loading mechanism is configured to load the method code ~~for the classes~~ into the non-volatile memory;

wherein loading the method code into the non-volatile memory involves transforming the method code, wherein transforming the method code involves using the class definitions to resolve linkages in the method code so that the method code is ready for execution in the non-volatile memory without using a symbolic constant pool.

--End Examiner's Amendment--

Allowable Subject Matter

6. Claims 1-6, 8, 9, 11-17, 19, 20, 22-28, 30, 31, 33, and 34 are allowed.

7. The following is an examiner's statement of reasons for allowance:

The examiner indicated that this application would be in condition for allowance if the independent claims 1, 12, 23, and 34 are amended to include the features as argued by Applicant on pages 12 and 13, filed 2/2/07, including loading a suite file containing real class definitions, proxy class definitions, and method code associated with the real class definitions wherein the class definitions are used to resolve the methods without using a symbolic constant pool. The above features, taken in combination with all remaining features of the independent claim are not taught or suggested by the prior art of record. The applicant agreed to amend each of independent claims 1, 12, 23, and 34 as indicated by the examiner, to include the above limitations. The distinctions provided by the independent claims apply equally to all dependent claims. Thus all pending claims 1-6, 8, 9, 11-17, 19, 20, 22-28, 30, 31, 33, and 34 are allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion


8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Derek Rutten whose telephone number is (571)272-3703. The examiner can normally be reached on M-F 7:00-3:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (571)272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

jdr



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SUPERVISORY PATENT EXAMINER